

SPECIFICATION AMENDMENTS

1. Please replace the paragraph beginning at page 31, line 3 (the Abstract), with the following amended paragraph:

A system and architecture that supports an integrated imaging module for use between networks and portable communications products. The integrated imaging module contains a lens, memory, an input/output ~~means~~ device, and a multi-function semiconductor device, such as a Complementary Metal-Oxide Semiconductor (CMOS). Within the design of the ~~CMOS multi-function semiconductor device~~ are the functions of still and full-motion digital imaging, image processing, automatic identification, a secure personal database, biometric attribute identification for access control, personal finance information, wireless communication protocols, general purpose processing, and memory. The module may be incorporated into any portable wireless communication product and used to capture text and image data for incorporation into a wireless transmission to a remote device.

2. Please replace the paragraph beginning at page 12, line 9, with the following amended paragraph:

Referring to Figure 2, an integrated imaging module 100 is preferably incorporated within or as part of host device 120, which is illustrated as a portable wireless communications device 220 using an internal electronic ~~bus connection—222~~ bus connection 122. Portable wireless communications device 220 may be, for example, cellular or satellite telephones, such as a Nokia model 9000il or a NeoPoint model 1000; a wireless empowered Personal Digital Assistant (PDA) such as a 3Com Palm model Pilot III, IV, V, VII or like devices; a wireless empowered portable computer such as a Compaq Presario, Sony Vario, Apple PowerBook and the like; a portable automatic identification terminal such as a Telxon PTC-960LE or a Symbol

Technologies SPT 1700; or the like. Imaging module 100, as more fully described with reference to Figure 1, is connected to portable wireless communications product 220 via a high-speed electronic ~~bus 222~~ bus 122 to host device controller board 207. Power to imaging module 100, as well as the exchange of instructions and data, are accomplished via this connection point.

3. Please replace the paragraph beginning at page 13, line 13, with the following amended paragraph:

If an identical match is made or authenticated, processor layer 107 will extract the credit or debit account information stored in layer 105, and combine it with the digital values of the biometric attribute then entered by the user, along with the amount being charged, forming an integrated message. The integrated message, including data element identifiers, is then returned to controller 207, along with a telephone number or Internet web address of the associated financial institution. Controller 207 also manages encryption (and decryption) of the data to be transmitted where appropriate. Controller 207 then forwards the message to a transmitter 210 for broadcast via cellular/satellite network node 219 directly or (via the Internet node ~~220~~ 220a to the financial institution (See node 303g of Fig. 3). The financial institution node will then validate the user (typically employing the biometric attribute provided by the user as found in the integrated message) and account information received, validate instant credit worthiness, and accept or reject the transaction.

4. Please replace the paragraph beginning at page 14, line 14, with the following amended paragraph:

In an application where a user wishes to take a picture, a "Photo" option from a text or graphic menu displayed on portable wireless communications device 220 can be selected. This

selection activates a command from controller 207 to semiconductor module 130 that, in turn, activates analog to digital processing of the reflected light being sensed by layer 103. Additionally, a wireless communication connection is made via network node 219 or Internet node ~~220~~ 220a to an e-mail address or other networked repository. A subset of the pixel values sensed by layer 103 are captured and conveyed by processor layer 107 via input/output means 110 to controller board 207, causing a less than full resolution image to be displayed in real-time on display 214. Display 214 now functions as an imaging viewfinder for a digital camera function. Once the user frames the image to be captured, a button is depressed on input pad 215, or elsewhere on device 220, causing the instant digital image to be momentarily frozen on display 214 and causing the corresponding full resolution image to be stored in memory, preferably supplemental memory 109.

5. Please replace the paragraph beginning at page 15, line 21, with the following amended paragraph:

Simultaneously, a wireless communications link is established via controller 207 and transmitter 210 to the user's pre-selected Internet service provider node ~~220~~ 220a.

6. Please replace the paragraph beginning at page 16, line 11, with the following amended paragraph:

Automatic identification layer 104 of semiconductor device 130 would then be invoked, causing a real-time digital search of the ~~stored~~ image as it is transferred from sensor layer 103 to processor layer 107 in an effort to locate any form of indicia therein. Any indicia 217 so located would be decoded and the information contained within the indicia would be displayed on display 214. If multiple symbols were decoded, the user may highlight the information desired

to be compared and depress the “Send” key (e.g., a button) of device 220. This action will cause the highlighted information to be forwarded by controller 207 to transmitter 210 for wireless broadcast to the connected Internet web site. Once received at the web site node ~~220~~ 220a, an Internet-wide search could be conducted for the identical item number, a list compiled, and the compiled list returned via receiver 211 and controller 206 to display screen 214. Additionally, the returned information could include the location of alternative stores that carry the same product within an n-mile radius of the user’s present location, where “n” is a user selected distance. This can be accomplished either by a circuit, which cooperates with the Global Positioning System, that may be in or incorporated into device 220, or by determining the geographic location of the first relay tower used in the transmission by the user’s network operator node 219.